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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,518	04/01/2004	David Fultz	IDF 2564 (4000-15700)	8230
28003	7590	03/13/2009		
SPRINT 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			EXAMINER ABEDIN, SHANTO	
			ART UNIT 2436	PAPER NUMBER
			MAIL DATE 03/13/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,518	Applicant(s) FULTZ ET AL.	
	Examiner SHANTO M. ABEDIN	Art Unit 2436	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/01/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to the communication filed on 12/18/2008.
2. Claims 1-33 are currently presented for the examination.
3. Claims 1-33 have been rejected.

Response to Arguments

4. The applicant's arguments regarding 35 USC 103 (a) type rejections are fully considered, however, moot in view of new grounds of rejection presented in this office action. The examiner notes, upon further consideration, combination of the previously cited references Upton, Bhat et al, and Bhatia et al was found to teach the limitations set forth by the arguments (please see below for detail explanations).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-33 are rejected under 35 USC 103 (a) as being unpatentable over Upton (US 2003/0097574 A1) in view of Bhat et al (US 2003/0200465 A1) further in view of Bhatia et al (US 7,249,375 B2)

Regarding claim 1, Upton discloses a system to provide application-to-application enterprise security, the system comprising:

a security application program interface (Fig 4, Fig 5; Par 051, 061, 063, 069; container; application security services; security provider interfaces) and an application program interface (Fig 4, Fig 5; Par 061, 074, 127; application interfaces) coupled to a client application operable on a first operating system, the security application program interface operable to provide a security credential (Fig 4; Par 061-074, 127-130; container managed credentials; client application/ interfaces for storing, and providing security credentials);

an authentication authority (Par 063-065, 104, 115, 128, 145; SAS, or JAAS, or authentication/ authorization SPI) receiving the security credential (Par 0061-0069; credentials; security-principle; ra.xml file) from the security application program interface, the authentication authority further operable to communicate the token to the security application program interface where the security credential is valid, wherein the token contains user credentials encoded as a platform and application independent string data type (Fig 4; Par 063-069, 104, 114, 130, 150; service provider interface/ SPI; checking public/ password type, or generic/ token type credentials, or security-principal map element).

a store maintaining data validating the security credential (Par 061-069; credentials; security-principle; ra.xml file), the store in communication with the authentication authority to validate the security credential (Par 0065-0066; storing credential/ passwords, or ra.xml file);

the application program interface operable to communicating regarding the validating of the token (Par 061-074, 104, 114, 130, 150; client application/ interface using credentials/ token for mapping/ authentication) and

a server application operable on a second operating system to receive the token from the application program interface, the server application communicating with the authentication authority to

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validate the token to enable the client application to use services of the server application (Par 063-065, 0104, 114-116, 130; JAAS, or SPI, or 3rd party validating/ authenticating credentials).

Upton fails to disclose expressly the authentication authority further operable to generate a token.

However, Upton's teachings of using, and providing a token as credentials suggests enablement of generating the token (Par 063-065, 150, 065; storing, using token/ credentials, or ra.xml file).

Furthermore, Bhat et al discloses the authentication authority further operable to generate a token (Figure 6; Par 035, 066, 077-079; server system having token manager generating token). Bhat et al further discloses an authentication authority receiving the security credential from the security application program interface, the authentication authority further operable to communicate the token to the security application program interface where the security credential is valid, wherein the token contains user credentials encoded as a platform and application independent primitive data type (Par 035, 066, 077-079; token including string/ password, user identifying information; sending/ assigning token to application interface to authenticate user for particular application).

Alternatively, Bhatia et al teaches an authentication authority receiving the security credential from the security application program interface, the authentication authority (Col 3, starts at line 6; SSO servers) further generates a token and communicates the token to the security application program interface where the security credential is valid, wherein the token contains user credentials encoded as a platform and application independent string data type (Fig 3; Col 3, starts at line 16; XML/ security token for authentication);

a store maintaining data validating the security credential, the store in communication with the authentication authority to validate the security credential (Col 3, starts at line 44; generating, and storing tokens);

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the application program interface communicating regarding the validity of the token (Fig 3; Col 3, starts at line 16; authenticating security token); and

a server application on a second operating system (Fig 1, Fig 3; Col 3, starts at line 5; back end tier, or RDBMS application server) to receive the token from the application program interface, the server application communicating with the authentication authority (Fig 1, Fig 3; Col 3, starts at line 5; RDBMS application server communicating with the SSO authentication servers) to validate the token to enable the client application to use services of the server application (Fig 1, Fig 3; Col 3, starts at line 16; SSO enabled front end services uses token to access the backend-tier applications).

Bhatia et al , Bhat et al and Upton are analogous art because they are from the same field of authentication for network/ enterprise services. At the time of invention, it would have been obvious to a person with ordinary skill in the art to combine the teaching of Bhatia et al or Bhat et al with Upton to design the system wherein the authentication authority further operable to generate a token in order to facilitate an anonymous token based authentication.

Regarding claim 9, it is rejected applying as same motivation and rationale as applied above rejecting claim 1, furthermore, Upton discloses A method for providing application-to-application enterprise security, the method comprising:

coupling a security application program interface (Fig 4, Fig 5; Par 051, 061, 063, 069; container; application security services; security provider interfaces) and an application program interface to a client application on a first operating system (Fig 4; Par 061-074, 127-130; container managed credentials; client application/ interfaces for storing, and providing security credentials);

communicating a security credential from the security application program interface to an authentication authority (Par 063, 074, 127-130, 150; client application/ interface providing credentials; 3rd party, or JAAS, or service provider interface/ SPI authenticating public/ password type, or generic/ token type credentials);

communicating information related to the security credential (Par 0061-0069; credentials; security-principle; ra.xml file containing security-principle)between the authentication authority and a data store to determine whether the security credential is valid; wherein the token contains user credentials encoded as a platform and application independent primitive data type (Par 104, 114, 130, 150; service provider interface/ SPI; validating/ authenticating credentials);

communicating the token (Par 0061-0069; credentials; security-principle; ra.xml file containing security-principle) to the client application; providing, by the application program interface coupled to the client application, the token to a server application, the server application operable on a second operating system (Par 061-074, 127-130, 150; client application/ interface providing credentials; service provider interface/ SPI authenticating public/ password type, or generic/ token type credentials) ; and

validating, by the server application, the token before providing access to services of the server application by the client application (Par 0065-0069, 0104, 0114, 0130; storing credentials, or ra.xml file containing security-principle; SPI, or JAAS, or 3rd party validating/ authenticating credentials).

Upton fails to disclose expressly generating a token by the authentication authority when the security credential is valid.

However, Upton's teachings of using, and providing a token as credentials (Par 063-065, 0150, 0065; storing, using token/ credentials, or ra.xml file), suggests enablement of generating the token. Furthermore, Bhat et al discloses the authentication authority further operable to generate a token,

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wherein the token contains user credentials encoded as a platform and application independent primitive data type (Par 035, 066, 077-079; token).

Alternatively, Bhatia et al teaches generating a token by the authentication authority when the security credential is valid (Fig 3; Col 3, starts at line 16; generating security token upon user authentication) , wherein the token contains user credentials encoded as a platform and application independent string data type (Fig 3; Col 3, starts at line 16; XML/ security token for authentication); providing, by the application program interface coupled to the client application on the first operating system, the token to a server application, the server application on a second operating system; and validating, by the server application, the token before providing access to services of the server application by the client application (Fig 1, Fig 3; Col 3, starts at line 16; SSO enabled front end services uses token to access the backend-tier applications).

Regarding claim 2, Upton discloses the system of Claim 1, wherein the server application further comprises: an application program interface to communicate with the application program interface of the client application (Par 061-074, 127-130; client application/ interface); and a security application program interface to communicate with the authentication authority (Par 115, 128-130, 145-147; security services; authentication/ authorization SPI).

Regarding claim 3, Upton discloses wherein the server application is operable to cache the token after validating the token with the authentication authority such that when the client application requests service of the server application, via the application program interfaces of the client application, the server application uses the cached token to validate the client application (Par 065-069, 104, 114-

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116, 130; storing credentials, or ra.xml file containing security-principle; SPI, or JAAS, or 3rd party validating/ authenticating credentials).

Regarding claim 4, Upton system fails to disclose wherein the token generated by the authentication authority comprises a string including at least a portion of the security credential.

However, Bhat et al discloses wherein the token generated by the authentication authority comprises a string including at least a portion of the security credential (Par 031, 035, 066, 077-079; SSO token). Furthermore, Bhatia et al discloses wherein the token generated by the authentication authority comprises a string including at least a portion of the security credential (Col 3, starts at line 55; standard XML token)

Regarding claim 5 and 6, Bhat et al discloses wherein at least a portion of the token is in Extensible Markup Language format (Par 030; token as a part of URL; using XML). Furthermore, the examiner takes an official notice on that at the time of invention use of XML for defining credential or token was well known in art. Therefore, it would be obvious to a person of ordinary skill in art to define token in XML format so that it can be used in XML type URL access requests.

Regarding claim 7, Bhat et al discloses wherein the token includes information related to an expiration date of the token (Par 031-077).

Regarding claim 8, Bhatia discloses wherein the authentication authority determines whether the authentication authority generated the token to validate the token (Col 3, starts at line 55; verifying the authentication token)

Regarding claims 10-12, 15 and 29, they recite the limitations of claims 1-3, 8-9 and 28, therefore, they are rejected applying as above rejecting claims 1-3, 8-9 and 28.

Regarding claims 13-14, 16-17, 19 and 21-23, they recite the limitations of claims 4-7 and 9, therefore, they are rejected applying as above rejecting claims 4-7 and 9.

Regarding claim 18, Bhat et al discloses wherein the token includes a portion of the security credential in a string format (Par 066, 071, 078; SSO token). Furthermore, ***Bhatia et al*** discloses wherein the token includes a portion of the security credential in a string format (Col 3, starts at line 55; standard XML token)

Regarding claim 20, Bhat et al discloses wherein the token is encrypted (Par 0066-0078; encrypted SSO token).

Regarding claim 24, Upton discloses wherein the security credential is further defined as including a password and user identification (Par 061, 071, 074, 0150). Furthermore, ***Bhat et al*** discloses wherein the security credential is further defined as password and user identification (Par 035, 066, 077).

Regarding claim 25, it recites the limitations of claim 20 and 24, therefore, it is rejected applying as above rejecting claims 20 and 24.

Regarding claim 26, Bhatia discloses the method wherein the security credential is an X.509 certificate and the data store is a certificate authority (Col 3, starts at line 55; use of certificates as credentials).

Regarding claims 27-28, 30-33, they recite the limitations of claims 1, 4-7, 9, 26 and 28, therefore, they are rejected applying as above rejecting claims 1, 4-7, 9, 26 and 28.

Conclusion

6. **Examiner's note:** Examiner has cited particular columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may be applied as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

7. A shortened statutory period for response to this action is set to expire in 3 (Three) months and 0 (Zero) days from the mailing date of this letter. Failure to respond within the period for response will result in ABANDONMENT of the application (see 35 U.S.C 133, M.P.E.P 710.02(b)).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanto M Abedin whose telephone number is 571-272-3551. The examiner can normally be reached on M-F from 9:00 AM to 5:30 PM. If attempts to reach the examiner by telephone are

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unsuccessful, the examiner's supervisor, Moazzami Nasser, can be reached on 571-272-4195. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shanto M Z Abedin

Examiner, A.U. 2436

/Nasser G Moazzami/

Supervisory Patent Examiner, Art Unit 2436